=> file casreact
FILE 'CASREACT' ENTERED AT 11:09:47 ON 09 JUN 2005

FILE CONTENT:1840 - 5 Jun 2005 VOL 142 ISS 23

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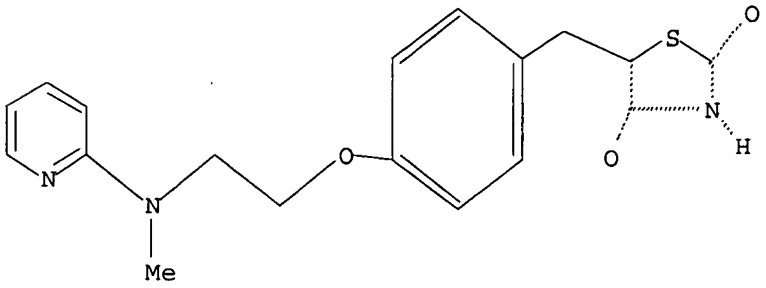
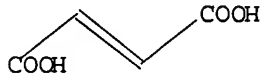
This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que
L1 STR





Structure attributes must be viewed using STN Express query preparation.
L3 4 SEA FILE=CASREACT SSS FUL L1 (19 REACTIONS)

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L3 ANSWER 1 OF 4 CASREACT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 142:280198 CASREACT
TITLE: Methods of preparing rosiglitazone free base and rosiglitazone maleate of particular polymorphic forms

INVENTOR(S): Kankan, Rajendra Narayanrao; Rao, Dharmaraj Ramachandra; Phull, Manjinder Singh; Birari, Dilip Ramdas
PATENT ASSIGNEE(S): Cipla Limited, India
SOURCE: Brit. UK Pat. Appl., 33 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2405403	A1	20050302	GB 2003-20304	20030829
WO 2005021541	A2	20050310	WO 2004-GB3519	20040813
WO 2005021541	A3	20050506		

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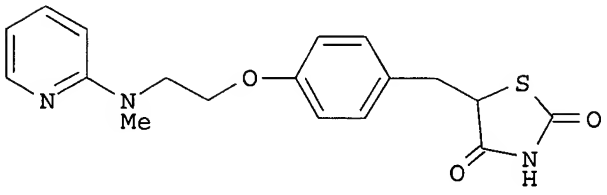
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2003-20304 20030829
GI



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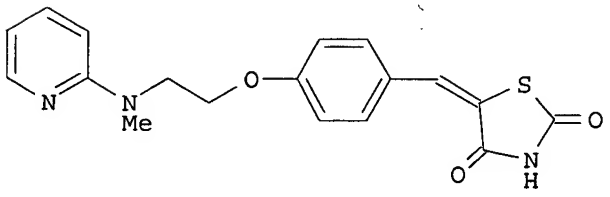


II

AB Crystalline rosiglitazone maleate [I·(Z)-HO2CCH:CHCO2H] of Form A, a process of its preparation by crystallization from a solvent medium, preparation of rosiglitazone of Form B from Form A and polymorphous mixts. of both Form A and Form B. The forms may be characterized by their X-ray diffraction pattern or IR absorption spectrum. A process of preparing rosiglitazone free base comprises reduction of 5-[4-[2-(N-methyl-N-(2-

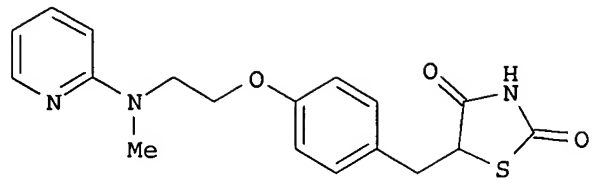
pyridyl)amino)ethoxy]benzylidene]thiazolidine-2,4-dione (II) in the presence of a cobalt ion, a ligand and a reducing agent. The cobalt ion is provided as cobaltous chloride, cobaltous diacetate or cobaltic chloride, the ligand is dimethylglyoxime, 2,2'-bipyridyl or 1,10-phenanthroline and the reducing agent is sodium borohydride, lithium borohydride, potassium borohydride, tetraalkylammonium borohydride or zinc borohydride. The free base may be further converted to rosiglitazone maleate. Thus, I·(Z)-HO2CCH:CHCO2H was prepared from II via reduction with NaBH4 in aqueous THF containing NaOH, catalytic CoCl2 and dimethylglyoxime followed by crystallization in MeOH containing (Z)-HO2CCH:CHCO2H. The rosiglitazone free base, rosiglitazone maleate of Form A or rosiglitazone maleate of Form B may be useful in the treatment of various diseases, in particular diabetes mellitus, hyperlipidemia, hyperglycemia, hypertension, cardiovascular disease or eating disorders. Tablet formulations containing I·(Z)-HO2CCH:CHCO2H was prepared

RX(2) OF 2 - REACTION DIAGRAM NOT AVAILABLE
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 4 CASREACT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 142:261528 CASREACT
TITLE: Process for the preparation of 5-[[4-[2-[N-methyl-N-(2-pyridyl)amino]ethoxy]phenyl]methyl]thiazolidine-2,4-dione (Rosiglitazone) maleate via reduction with sodium boronhydride using cobaltous chloride and dimethyl glyoxime
INVENTOR(S): Gediya, Lalji Karsan; Tarur, Venkatasubramanian Radha; Kadam, Suresh Mahadev; Patnekar, Subodh Shashikant
PATENT ASSIGNEE(S): India
SOURCE: U.S. Pat. Appl. Publ., 6 pp., Cont.-in-part of U.S. Ser. No. 431,847.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005043539	A1	20050224	US 2004-938317	20040910
US 2004224998	A1	20041111	US 2003-431847	20030507
PRIORITY APPLN. INFO.:			US 2003-431847	20030507
			IN 2004-MU80	20040128
			US 2003-468208P	20030506

GI



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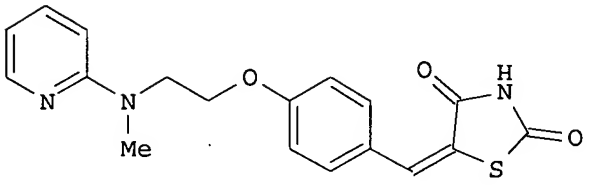
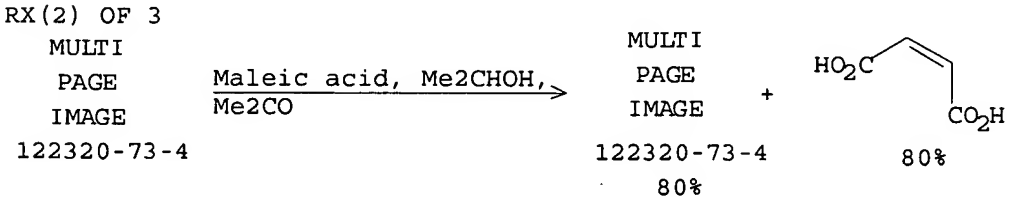


III

AB The invention is directed to a process for the preparation of 5-[4-[2-[N-methyl-N-(2-pyridyl)amino]ethoxy]phenyl methyl]thiazolidine-2,4-dione (Rosiglitazone, I) maleate (II, i.e. I•maleic acid) via reduction of benzylidene derivative III with a hydride of Group III metal with alkali metal, e.g. NaBH4, using Co ions as the metal ion of the ligand, di-Me glyoxime or 2,2'-bipyridyl as ligands. Specifically, the process consists of purification of III in hydroxylic solvent, reduction of III, purification of I by treating with an alc. NH3 solution, and conversion to the maleate II by reacting I with maleic acid in AcOH. The advantages includes use of cheaper and easily available raw materials. Thus, I was obtained in 80% yield, and 99.5% purity via reduction using CoCl2•6H2O and dimethylglyoxime.

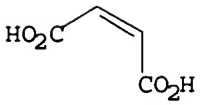
RX(2) OF 3



L3 ANSWER 3 OF 4 CASREACT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 135:107272 CASREACT
TITLE: An improved procedure for the synthesis of rosiglitazone maleate
AUTHOR(S): Fu, Ye; Wang, Shaojie; Zhang, Weige; Wu, Yue
CORPORATE SOURCE: Department of Pharmaceutics, Shenyang Pharmaceutical University, Shenyang, 110016, Peop. Rep. China
SOURCE: Shenyang Yaoke Daxue Xuebao (2001), 18(1), 18-19
CODEN: SYDXFF; ISSN: 1006-2858
PUBLISHER: Shenyang Yaoke Daxue Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Rosiglitazone maleate was synthesized starting from 2-chloropyridine and N-methylethanolamine via 5 steps, giving the title compound with over all

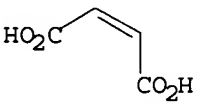
yield 28.6%.

RX(4) OF 15

MULTI PAGE IMAGE 122320-73-4 —Maleic acid, EtOH→ MULTI PAGE IMAGE 122320-73-4 84% + 

L3 ANSWER 4 OF 4 CASREACT COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 134:222652 CASREACT
TITLE: Synthesis of rosiglitazone maleate
AUTHOR(S): Wang, En-Si; Wang, Jun-Cai; Jiang, Zuo-Hui; Wang, Jia-Peng
CORPORATE SOURCE: College of Life Science, Jilin University, Changchun, 130023, Peop. Rep. China
SOURCE: Jilin Daxue Ziran Kexue Xuebao (2000), (3), 68-72
CODEN: CLTTDI; ISSN: 0529-0279
PUBLISHER: Jilin Daxue Ziran Kexue Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The title hypoglycemic agent was synthesized by two different synthetic routes. The total yields were 15% and 17% resp. The route via Meerwien arylation was convenient. The route via Knoevenagel condensation was simple and short. The structure of the intermediates and the target mol. was confirmed by MS, elementary anal., 1H NMR and 13C NMR spectra in our expts. The route without high pressure and temperature may be applied to industrial production

RX(5) OF 41

MULTI PAGE IMAGE 122320-73-4 —Maleic acid, MeOH→ MULTI PAGE IMAGE 122320-73-4 94% + 

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FILE 'CAPLUS' ENTERED AT 11:13:42 ON 09 JUN 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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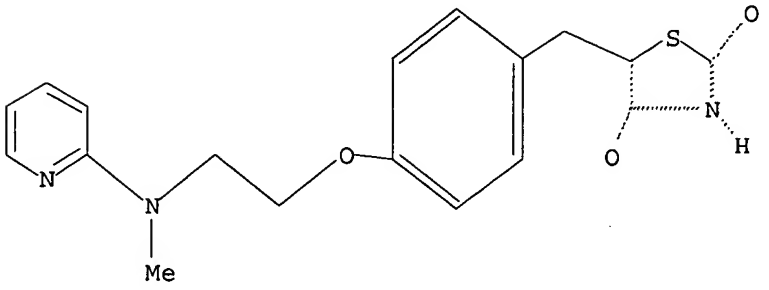
FILE COVERS 1907 - 9 Jun 2005 VOL 142 ISS 24
FILE LAST UPDATED: 8 Jun 2005 (20050608/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que
L8 STR



Structure attributes must be viewed using STN Express query preparation.
L9 108 SEA FILE=REGISTRY SSS FUL L8
L10 1249 SEA FILE=CAPLUS L9
L12 92 SEA FILE=CAPLUS L10 AND MALEATE
L13 6 SEA FILE=CAPLUS L12 AND POLYMORPH#

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L13 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:172433 CAPLUS
DOCUMENT NUMBER: 142:280198
TITLE: Methods of preparing rosiglitazone free base and rosiglitazone **maleate** of particular polymorphic forms
INVENTOR(S): Kankan, Rajendra Narayanrao; Rao, Dharmaraj Ramachandra; Phull, Manjinder Singh; Birari, Dilip Ramdas
PATENT ASSIGNEE(S): Cipla Limited, India
SOURCE: Brit. UK Pat. Appl., 33 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2405403	A1	20050302	GB 2003-20304	20030829
WO 2005021541	A2	20050310	WO 2004-GB3519	20040813
WO 2005021541	A3	20050506		

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NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG

PRIORITY APPLN. INFO.: GB 2003-20304 A 20030829
OTHER SOURCE(S): CASREACT 142:280198

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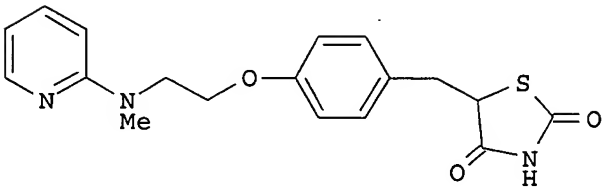

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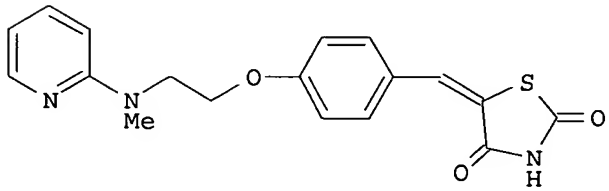


II

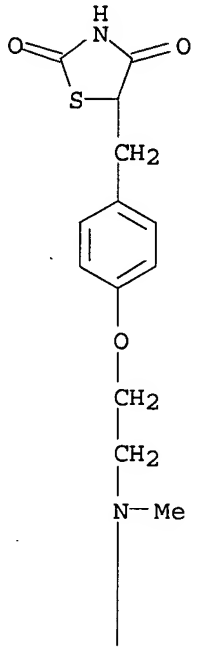
AB Crystalline rosiglitazone **maleate** [I·(Z)-HO2CCH:CHCO2H] of Form A, a process of its preparation by crystallization from a solvent medium, preparation of rosiglitazone of Form B from Form A and polymorphous mixts. of both Form A and Form B. The forms may be characterized by their X-ray diffraction pattern or IR absorption spectrum. A process of preparing rosiglitazone free base comprises reduction of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzylidene]thiazolidine-2,4-dione (II) in the presence of a cobalt ion, a ligand and a reducing agent. The cobalt ion is provided as cobaltous chloride, cobaltous diacetate or cobaltic chloride, the ligand is dimethylglyoxime, 2,2'-bipyridyl or 1,10-phenanthroline and the reducing agent is sodium borohydride, lithium borohydride, potassium borohydride, tetraalkylammonium borohydride or zinc borohydride. The free base may be further converted to rosiglitazone **maleate**. Thus, I·(Z)-HO2CCH:CHCO2H was prepared from II via reduction with NaBH4 in aqueous THF containing NaOH, catalytic CoCl2 and dimethylglyoxime followed by crystallization in MeOH containing (Z)-HO2CCH:CHCO2H.

The rosiglitazone free base, rosiglitazone **maleate** of Form A or rosiglitazone **maleate** of Form B may be useful in the treatment of various diseases, in particular diabetes mellitus, hyperlipidemia, hyperglycemia, hypertension, cardiovascular disease or eating disorders. Tablet formulations containing I·(Z)-HO2CCH:CHCO2H was prepared

IT **122320-73-4P**, Rosiglitazone
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with maleic acid; preparation of rosiglitazone free
base and **maleate polymorphs**)
RN 122320-73-4 CAPLUS
CN 2,4-Thiazolidinedione, 5-[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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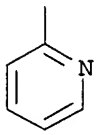

IT **227606-02-2P**, Rosiglitazone **maleate** hydrate
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of rosiglitazone free base and **maleate polymorphs**)
RN 227606-02-2 CAPLUS
CN 2,4-Thiazolidinedione, 5-[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]methyl]-, (2Z)-2-butenedioate (1:1), hydrate (9CI) (CA INDEX NAME)

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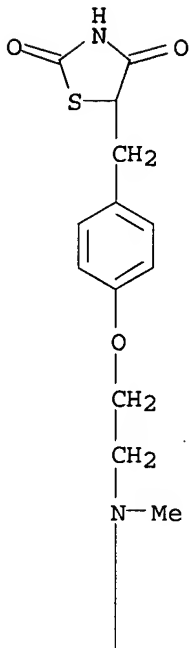
CRN 122320-73-4
CMF C18 H19 N3 O3 S

PAGE 1-A



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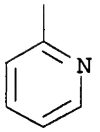

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CRN 110-16-7
CMF C4 H4 O4

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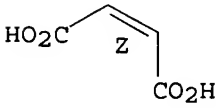

IT **155141-29-0DP**, Rosiglitazone **maleate, polymorphs**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(preparation, IR spectra and X-ray diffraction of; preparation of rosiglitazone
free base and **maleate polymorphs**)
RN 155141-29-0 CAPLUS
CN 2,4-Thiazolidinedione, 5-[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]methyl]-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

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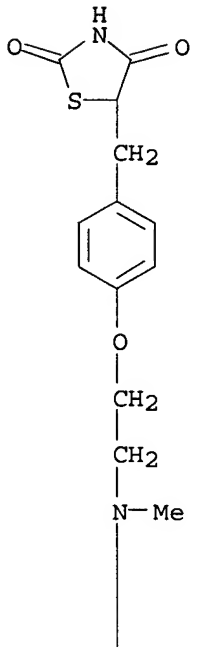
CRN 122320-73-4
CMF C18 H19 N3 O3 S

PAGE 1-A



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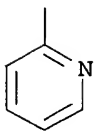
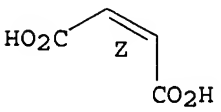


CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:875979 CAPLUS
DOCUMENT NUMBER: 141:337647
TITLE: Polymorphic forms of rosiglitazone **maleate**
INVENTOR(S): Turchetta, Stefano; Massardo, Pietro; Aromatario, Valentina
PATENT ASSIGNEE(S): Chemi S.P.A., Italy
SOURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1468997	A2	20041020	EP 2004-76138	20040413
EP 1468997	A3	20041103		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
CA 2464961	AA	20041018	CA 2004-2464961	20040416
US 2005014798	A1	20050120	US 2004-826868	20040416
PRIORITY APPLN. INFO.:			IT 2003-MI820 A	20030418
			US 2003-472756P P	20030521

AB Three new polymorphic crystalline forms of rosiglitazone **maleate**, Forms I, II and III and methods for selectively obtaining each form are described. Rosiglitazone **maleate** is obtained in the form of the single **polymorph** I by blending an approx. equimolar mixture of rosiglitazone base and maleic acid in a series of solvents which comprise isopropanol, acetone, EtOAc iso-Pr acetate, THF, followed by cooling of the mixture to ambient temperature The form II is obtained by treatment of a approx. equimolar mixture of rosiglitazone base and maleic acid in water under reflux, followed by cooling of the mixture to ambient temperature The **polymorph** III is obtained by treating a mixture of rosiglitazone base with a double molar quantity of maleic acid in ethanolic solvents.

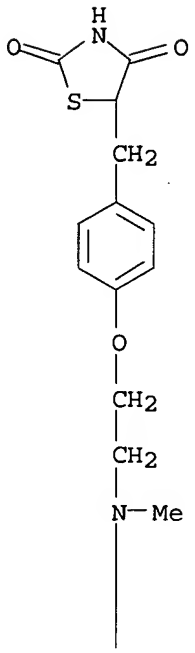
IT **155141-29-0P**, Rosiglitazone **maleate**
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polymorphic forms of rosiglitazone **maleate**)

RN 155141-29-0 CAPLUS
CN 2,4-Thiazolidinedione, 5-[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]methyl]-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

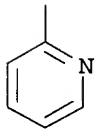
CM 1

CRN 122320-73-4
CMF C18 H19 N3 O3 S

PAGE 1-A



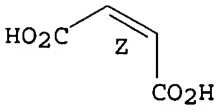
PAGE 2-A



CM 2

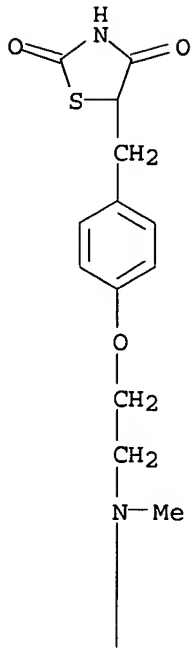
CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



IT **122320-73-4**, Rosiglitazone
RL: RCT (Reactant); RACT (Reactant or reagent)
(polymorphic forms of rosiglitazone **maleate**)
RN 122320-73-4 CAPLUS
CN 2,4-Thiazolidinedione, 5-[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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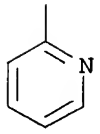


L13 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:817891 CAPLUS
DOCUMENT NUMBER: 141:320076
TITLE: Process for preparing a **polymorph** of rosiglitazone **maleate**
INVENTOR(S): Craig, Andrew Simon; Giles, Robert Gordon; Ho, Tim Chien Ting; Sasse, Michael John
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004085435	A1	20041007	WO 2004-GB1306	20040325

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2003-7259 A 20030328

AB A crystallization process for preparing a **polymorph** of rosiglitazone **maleate** free of any other polymorphic forms comprises crystallization in solvents such as anisole, iso-Pr acetate, Et acetate, and Me iso-Bu ketone.

IT **155141-29-0P**, Rosiglitazone **maleate**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(preparation of a **polymorph** of rosiglitazone **maleate**)

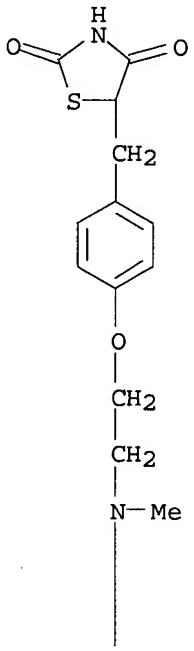
RN 155141-29-0 CAPLUS

CN 2,4-Thiazolidinedione, 5-[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]methyl]-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 122320-73-4
CMF C18 H19 N3 O3 S

PAGE 1-A



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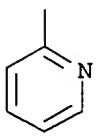
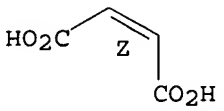


CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:772629 CAPLUS
DOCUMENT NUMBER: 133:340315
TITLE: Therapeutic action and properties of a polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt
INVENTOR(S): Blackler, Paul David James; Browne, Christine Marie; Coakley, Timothy G.; Giles, Robert Gordon; Morrissey, Gillian
PATENT ASSIGNEE(S): SmithKline Beecham PLC, UK; SmithKline Beecham (Cork) Limited
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064896	A1	20001102	WO 2000-GB1520	20000419
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2370280	AA	20001102	CA 2000-2370280	20000419
EP 1173435	A1	20020123	EP 2000-920892	20000419
EP 1173435	B1	20030730		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000009932	A	20020409	BR 2000-9932	20000419
TR 200103062	T2	20020521	TR 2001-200103062	20000419
JP 2002543077	T2	20021217	JP 2000-614248	20000419
EP 1304330	A2	20030423	EP 2002-80321	20000419
EP 1304330	A3	20031119		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
AT 246191	E	20030815	AT 2000-920892	20000419

AU 765005	B2	20030904	AU 2000-41308		20000419
PT 1173435	T	20031231	PT 2000-920892		20000419
NZ 515168	A	20040227	NZ 2000-515168		20000419
ES 2203453	T3	20040416	ES 2000-920892		20000419
NO 2001005147	A	20011217	NO 2001-5147		20011022
HR 2001000772	A1	20021031	HR 2001-772		20011022
ZA 2001008719	A	20020621	ZA 2001-8719		20011023
BG 106121	A	20020531	BG 2001-106121		20011120
US 6806280	B1	20041019	US 2001-48123		20011203
HK 1045153	A1	20040709	HK 2002-104879		20020628
US 2005080114	A1	20050414	US 2004-935939		20040908
PRIORITY APPLN. INFO.:			GB 1999-9473	A	19990423
			GB 1999-12196	A	19990525
			EP 2000-920892	A3	20000419
			WO 2000-GB1520	W	20000419
			US 2001-48123	A3	20011203

AB A polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2, 4-dione, maleic acid salt (the "**Polymorph**") characterized in that it provides: (i) an IR spectrum containing peaks at 1763, 912, 856 and 709 cm-1; and/or (ii) a Raman spectrum containing peaks at 1762, 1284, 912 and 888 cm-1; and/or (iii) a solid-state 13C NMR spectrum containing peaks at 111.0, 113.6, 119.8, 129.1, 130.9, 131.8, 134.7, 138.7, 146.5, 152.7, 157.5, 169.5, 171.0, 178.7 ppm; and/or (iv) an x-ray powder diffraction (XRPD) pattern which gives calculated lattice spacings at 5.87, 5.30, 4.69, 4.09, 3.88, 3.61, 3.53 and 3.46 Angstroms; a process for preparing such a compound, a pharmaceutical composition containing such a compound and the use of such a compound in medicine.

IT **155141-29-0**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antidiabetic action and properties of polymorphic form of [[(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidinedione **maleate**)

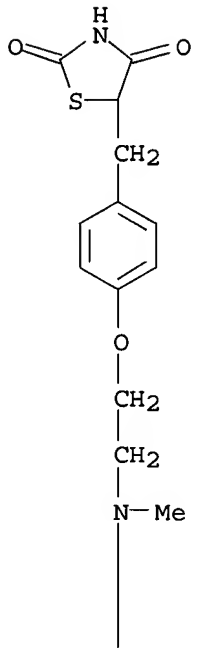
RN 155141-29-0 CAPLUS

CN 2,4-Thiazolidinedione, 5-[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]methyl]-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

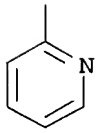
CM 1

CRN 122320-73-4
CMF C18 H19 N3 O3 S

PAGE 1-A



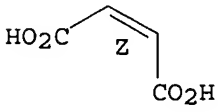
PAGE 2-A



CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:772627 CAPLUS
DOCUMENT NUMBER: 133:340314
TITLE: Therapeutic action and properties of a polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt

INVENTOR(S): Blackler, Paul David James; Giles, Robert Gordon; Moore, Stephen; Sasse, Michael John
PATENT ASSIGNEE(S): SmithKline Beecham PLC, UK
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064893	A2	20001102	WO 2000-GB1522	20000419
WO 2000064893	A3	20010125		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2370262	AA	20001102	CA 2000-2370262	20000419
EP 1175418	A2	20020130	EP 2000-922793	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000009935	A	20020416	BR 2000-9935	20000419
TR 200103060	T2	20020521	TR 2001-200103060	20000419
JP 2002543076	T2	20021217	JP 2000-614245	20000419
EP 1277753	A1	20030122	EP 2002-80319	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
NZ 515167	A	20040227	NZ 2000-515167	20000419
NO 2001005148	A	20011217	NO 2001-5148	20011022
HR 2001000774	A1	20021031	HR 2001-774	20011022
ZA 2001008718	A	20021203	ZA 2001-8718	20011023
BG 106122	A	20020531	BG 2001-106122	20011120
AU 2002027551	A5	20020516	AU 2002-27551	20020320
AU 771342	B2	20040318		
US 2004248945	A1	20041209	US 2004-843741	20040512

PRIORITY APPLN. INFO.:

GB 1999-9471	A	19990423
GB 1999-12195	A	19990525
AU 2000-43072	A3	20000419
EP 2000-922793	A3	20000419
WO 2000-GB1522	W	20000419
US 2002-30877	B1	20020422

AB A polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt (the "**Polymorph**") characterized in that it provides: (i) an infra red spectrum containing peaks at 1752, 1546, 1154, 621, and 602 cm-1; and/or (ii) a Raman spectrum containing peaks at 1751, 1243 and 602 cm-1; and/or (iii) a solid-state NMR spectrum containing peaks at 111.9, 114.8, 119.6, 129.2, 134.0, 138.0, 144.7, 153.2, 157.1, 170.7, 172.0 and 175.0 ppm; and/or (iv) an x-ray powder diffraction (XRPD) pattern which gives calculated lattice spacings of 6.46, 5.39, 4.83, 4.68, 3.71, 3.63, 3.58, and 3.48 Angstroms; a process for preparing such a compound, a pharmaceutical composition containing such a compound and the use of such a compound in medicine.

IT **168553-12-6**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
(antidiabetic action of polymorphic form of [[(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidinedione **maleate**)

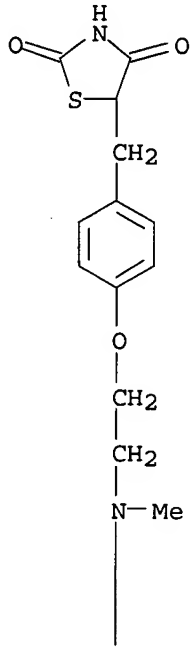
RN 168553-12-6 CAPLUS

CN 2,4-Thiazolidinedione, 5-[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]methyl]-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 122320-73-4
CMF C18 H19 N3 O3 S

PAGE 1-A



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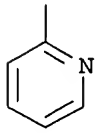
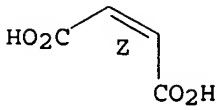


CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



L13 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:772626 CAPLUS
DOCUMENT NUMBER: 133:340313
TITLE: Therapeutic action and properties of a polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt
INVENTOR(S): Blackler, Paul David James; Giles, Robert Gordon; Sasse, Michael John
PATENT ASSIGNEE(S): SmithKline Beecham P.L.C., UK
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064892	A2	20001102	WO 2000-GB1514	20000419
WO 2000064892	A3	20010125		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2370258	AA	20001102	CA 2000-2370258	20000419
EP 1173434	A2	20020123	EP 2000-920889	20000419
EP 1173434	B1	20030820		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
TR 200103061	T2	20020521	TR 2001-200103061	20000419
BR 2000009934	A	20020604	BR 2000-9934	20000419
JP 2002543075	T2	20021217	JP 2000-614244	20000419
EP 1284268	A1	20030219	EP 2002-80320	20000419
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AT 247653	E	20030915	AT 2000-920889	20000419
AU 765498	B2	20030918	AU 2000-41306	20000419
PT 1173434	T	20031231	PT 2000-920889	20000419
NZ 515163	A	20040227	NZ 2000-515163	20000419
ES 2204557	T3	20040501	ES 2000-920889	20000419
TW 591027	B	20040611	TW 2000-89107633	20000424
NO 2001005149	A	20011217	NO 2001-5149	20011022
HR 2001000773	A1	20021031	HR 2001-773	20011022
ZA 2001008722	A	20020911	ZA 2001-8722	20011023
BG 106119	A	20020531	BG 2001-106119	20011120
US 6815457	B1	20041109	US 2002-30323	20020515
HK 1045154	A1	20040625	HK 2002-104882	20020628
US 2004092555	A1	20040513	US 2003-703887	20031107

PRIORITY APPLN. INFO.:

GB 1999-9472	A	19990423
GB 1999-12197	A	19990525
EP 2000-920889	A3	20000419
WO 2000-GB1514	W	20000419
US 2002-30323	A3	20020515

AB A polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt (the "**Polymorph**") characterized in that it: (i) provides an IR spectrum containing peaks at 1360, 1326, 1241, 714 and 669 cm-1; and/or (ii) provides a Raman spectrum containing peaks at 1581, 768, 670, 271 and 226 cm-1; and/or (iii) provides a solid-state NMR spectrum containing peaks at chemical shifts substantially; and/or (iv) provides an x-ray powder diffraction (XRPD) pattern containing peaks; a process for preparing such a compound, a pharmaceutical composition containing such a compound and the use of such a compound in medicine.

IT **168553-12-6**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antidiabetic action of polymorphic form of [[(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidinedione **maleate**)

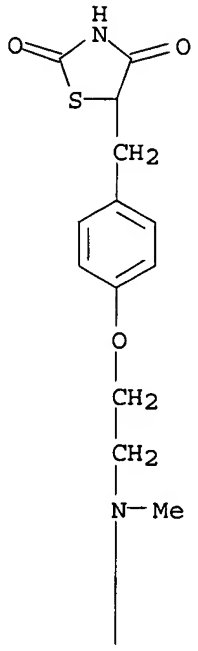
RN 168553-12-6 CAPLUS

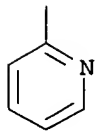
CN 2,4-Thiazolidinedione, 5-[[4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]methyl]-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 122320-73-4
CMF C18 H19 N3 O3 S

PAGE 1-A

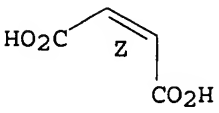




CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



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